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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,392	10/25/2000	Jerry Moro	17900-32	4119

7590 05/22/2002

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EXAMINER

JONES, JUDSON

ART UNIT PAPER NUMBER

2834

DATE MAILED: 05/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/696,392

Applicant(s)

MORO ET AL.

Examiner

Judson H Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) 31-43 and 63-76 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20 is/are allowed.
- 6) ☒ Claim(s) 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 23-30 and 58-62 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The term "providing more surface" in claims 58-62 is a relative term which renders the claim indefinite. The term "more" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Denk.

Denk discloses a flux return 30 as described in column 2 lines 7-11, a top plate 14, a bottom plate 16, a magnet 24 as described in column 1 lines 59-64 with a top magnetic gap between the top plate and the flux return and a bottom magnetic gap between the bottom plate and the flux return.

### ***Allowable Subject Matter***

Claims 1-20 and 44-62 are allowed.

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Claims 23-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 58-62 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or teach an electromagnetic motor having a flux return including an upper pole piece, a lower pole piece and a flux stabilization ring around the upper and lower pole pieces combined with a top plate, a bottom plate, a magnet and magnetic gaps between the flux return and the top and bottom plates as recited in claims 1 and 44. The prior art of record does not disclose or teach a electromagnetic motor having a top plate, a bottom plate, a magnet, gaps between the flux return and the top and bottom plates combined with the top and bottom plates being located within the flux return as recited in claim 23. The prior art of record does not disclose or teach a electromagnetic motor having a top plate, a bottom plate, a magnet, gaps between the flux return and the top and bottom plates combined with saturation levels for the gaps between 10k Gauss and 22k Gauss as recited in claim 24. The prior art of record does not disclose or teach a electromagnetic motor having a top plate, a bottom plate, a magnet, gaps between the flux return and the top and bottom plates combined with saturation levels for the plates between 10k Gauss and 22k Gauss as recited in claim 25. The prior art of record does not disclose or teach a electromagnetic motor having a top plate, a bottom plate, a magnet, gaps between the flux return and the top and bottom plates combined with saturation levels for the flux return between 10k Gauss and 22k Gauss as recited in claim 26. The prior art of record does

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not disclose or teach a electromagnetic motor having a top plate, a bottom plate, a magnet, gaps between the flux return and the top and bottom plates combined with top plate tips as recited in claims 27-29. The prior art of record does not disclose or teach a electromagnetic motor having a top plate, a bottom plate, a magnet, gaps between the flux return and the top and bottom plates combined with a hole along the centerline of the motor as recited in claim 30. The prior art of record does not disclose or teach a method for minimizing the modulation in the magnetic gap of an electromagnetic motor by saturating top and bottom plates near top and bottom magnetic gaps as recited in claim 49. The prior art of record does not disclose or teach that the area of the top and bottom plates juxtaposed to top and bottom magnetic gaps is a significant design variable.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grodinsky et al. discloses an electromagnetic motor for a loudspeaker having a bottom plate 52 with a flux gap between the plate and a flux return path 62 but does not disclose a top plate. Barclay et al. discloses flux returns 57 and plates 50 with a magnet in between but does not disclose a magnetic gap between the flux return assembly and the top or bottom plates as shown in figure 2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H Jones whose telephone number is 703-308-0115. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JHJ *[Signature]*  
May 15, 2002

*[Signature]*  
NESTOR RAMIREZ  
SUPERVISOR PATENT EXAMINER  
TECHNOLOGY CENTER 2800